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# X. Descriptions of twenty-two new species of Equatorial Lepidoptera. By W. C. HEWITSON, F.L.S.

#### [Read 2nd May, 1870.]

I HAVE recently described in a separate publication, entitled "Equatorial Lepidoptera collected by Mr. Buckley," the new species of butterflies brought home by that gentleman from Ecuador. Before Mr. Buckley left Guayaquil, on his return to England, he sent out as a collector a native boy, who had been his faithful attendant in his travels. This boy, Manuel Villagomes, has proved himself an apt scholar, and has sent us a very fine collection of butterflies, in beautiful condition, and containing, as will be seen by the following descriptions, many new species, some of peculiar interest, from their strange form and colour, others from their size, usually surpassing the same species brought by Mr. Buckley. Mr. Villagomes went, as Mr. Buckley did, from Gua-yaquil to Riobamba, whence he proceeded to Gualaquisa, his head quarters, crossing the high mountain range of St. Rosario, where the several species of *Pronophila* were taken. These, and *Mesosemiæ*, some of which are very beautiful, furnish the largest number of new species. The collection contains, besides those here described, species of great rarity; Papilio Epenetus, until now unique in the collection of Mr. Saunders; several specimens, male and female, of the very rare Leptalis Orise; a second example of Erycina formosissima; and the remarkable *Taygetis* albinotata, hitherto only in the collection of the British Museum.

## Leptalis Praxidice.

Male. Upperside. Dark lilac-blue. Anterior wing crossed from the middle of the inner margin to beyond the middle of the wing by a broad semi-transparent band of brown, divided by the median nervures into four parts: two white spots (one bifid) at the middle of the costal margin, and three similar spots (one bifid) before the apex. Posterior wing crossed from near the middle of the inner margin to the outer margin near the apex by a band and spot of white, the band divided into four parts by the nervures, the spot near the apex.

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Underside. Blue-pearly-gray, clouded with darker colour: the outer margins yellow: a submarginal black line broken into spots near the apex. Anterior wing with the white spots as above: brown from the base to the subapical spots, white where the wings meet. Posterior wing with two spots of yellow at the base, and some irrorations of the same colour on the subcostal nervure: the band of white as above, and four spots (one in the cell) between it and the middle of the costal margin.

Exp.  $2\frac{1}{10}$  inches.

Hab.--Granadillas.

Singularly distinct from any known species.

# Euterpe Epimene.

Female. Upperside. Dark brown. Anterior wing crossed obliquely at the middle by a broad band of scarlet, divided into three parts (one in the cell) by the nervures. Posterior wing paler brown towards the inner margin.

Underside. As above, except that the anterior wing has two yellow spots before the apex, and a marginal series of spots of the same colour; that the posterior wing has two carmine spots at the base: four spots near the base of the costal margin, two linear spots near the inner margin, and a submarginal and marginal series of spots, all yellow. Exp.  $2\frac{1}{2}$  inches.

Hab.-St. Joaquim.

I think that this is probably the female of E. Teutamis. The undersides are the same.

## Ithomia Pulcheria.

Male. Upperside. Semi-transparent. Anterior wing with the margins and nervures and a band at the end of the cell dark brown: the cell near the base orange; a triangular pale brown spot, and a pale yellow spot within the cell: a bifid spot of yellow on the costal margin beyond the cell: crossed by a series of yellow spots beyond the middle: Posterior wing tinted with orange ; the nervures and a broad submarginal band opaque orange; the outer margin brown.

Underside. As above, except that there are three minute white spots at the apex of the anterior wing; that there are two similar spots at the apex of the posterior wing, and four from the middle of the outer margin to the anal angle.

Female like the male, except that the wings are of different form: that there is a larger space of yellow on the anterior wing: that the inner margin, except near the base, is orange; that the posterior wing is all opaque orange, and that the outer margin is very narrow.

Exp.  $2\frac{6}{10}$  inches.

Hab.—Churuyaco.

Belongs to the *Dircenna* group. Both sexes have the neuration of *I. Epidero*.

#### Ithomia Praxilla.

*Female.* Upperside. Transparent white: the nervures black: the margins (except at the anal angle of the posterior wing, which is rufous orange) dark brown, broad; the outer margins traversed by a series of white spots. Anterior wing with an oblong transparent spot on the costal margin at the end of the cell.

Underside. As above, except that there is a bluewhite spot at the base of the posterior wing.

Exp.  $2\frac{9}{10}$  inches.

Hab.—Churuyaco.

This large and beautiful species has the neuration of *I. Cæno*, but differs both in form and the position of the nervures from those species, *I. Apulia* and *Adelinda*, which have the anal angle rufous.

#### Ithomia Ozia.

Male. Upperside. Transparent yellow-white; the margins and nervures (which are slender) black. Anterior wing with a triangular band at the end of the cell; a small oblong spot on the costal margin.

Underside. As above, except that the outer margins are traversed by a rufous band forming sagittate spots at the ends of the nervures of the posterior wing. Anterior wing with three minute apical white spots. Posterior wing with a marginal series of five white spots.

Exp. 2 inches.

Hab.—Granadillas.

Neuration, form, and size of *I. Zerlina*, ("Exotic Butterflies," *Ithomia*, fig. 96), but of very different colour.

#### Ithomia Pronuba.

Male. Upperside. Transparent: the margins broad, dark brown, especially on the posterior wing; the nervures black. Anterior wing with the costal margin near the base rufous: the band at the end of the cell triangular, broad: a large white spot beyond it reaching the second median nervule, the nervures crossing it white.

Underside. Rufous where brown above. Anterior wing with three apical white spots. Posterior wing with a marginal series of five triangular white spots, bordered with black.

*Female* like the male, except that it is suffused with black, bordering the median nervure and the white spot, and that the white spot is extended (but less distinct) to the inner margin.

Exp.  $2\frac{1}{10}$  inches.

Hab.—Granadillas.

This has the neuration of I. Zerlina, and is probably only a variety of that species.

# Agrias Zenodorus.

Male. Upperside. Black. Anterior wing crossed at the middle from the costal margin to near the apex by a very broad oblique band of orange, divided into seven parts by the nervures: two subapical spots (one clouded) of pale yellow. Posterior wing with a large spot of brilliant Morpho-like blue near the outer margin.

Underside. Anterior wing as above, except that there are two black spots within the cell: a spot near the costal margin, and a band near the apex, pale yellow. Posterior wing black, crossed by five bands of pale yellow; the first near the base from the costal margin to the middle of the first median nervure, the second shorter, the third angular, the fourth linear and clouded, the fifth submarginal: a linear yellow spot within the cell, and a series of blue spots between the fourth and fifth bands: the costal and outer margins and anal angle yellow.

Exp.  $3\frac{2}{10}$  inches.

Hab.-Gualaquisa.

This is most likely only a variety of A. Ædon, although I have been tempted by its great beauty to distinguish it by a name. On the underside they are identical. On the upperside the transverse band, which is in A. Ædon carmine, is here orange. The blue spot of the posterior wing, which in *A. Ædon* varies much, and is absent altogether from one of my specimens, is in *A. Zenodorus* much larger, and of a brilliant *Morpho* blue.

### Pronophila Praxithea.

Male. Upperside. Dark brown; outer margin dentate, slightly on the anterior, strongly on the posterior wing. Anterior wing crossed from beyond the middle of the costal margin to the anal angle by a very broad band of orange, widest at the middle, slightly dentate on both sides. Posterior wing with an orange spot at the apex.

Underside as above, except that the costal margin is marked with lines of white, and that it is undulate near the apex with lilac, and marked with three minute white spots. Posterior wing undulate near the costal margin from its middle to the apex with rufous-brown and lilacwhite, and marked with three minute white spots; crossed beyond the middle by an irregular band undulate with brown and white: slightly and indistinctly undulate between this band and the outer margin and near the inner margin with paler colour.

Exp.  $2\frac{13}{20}$  inches.

Hab.-St. Rosario.

A beautiful species, marked like *P. Phila* on the upperside, but twice the size.

## Pronophila Pelinna.

Male. Upperside. Dark brown, the outer margins slightly indented. Anterior wing crossed from the costal margin beyond its middle to very near the anal angle by a broad band of orange, slightly indented on its inner border. Posterior wing crossed beyond the middle from the costal margin to the anal angle by a broad band of orange, very irregular and zig-zag on its outer border.

Underside as above, except that the anterior wing is undulate with yellow near the apex, and crossed by a series of four minute white spots, and that the orange band of the posterior wing is much paler, is undulate and clouded with brown, is marked near the apex with a spot of lilac, and crossed by three or four minute white spots.

Exp.  $2\frac{1}{10}$  inches.

Hab.-St. Rosario.

Nearly allied to P. Phae, more nearly to P. Alusana. TRANS. ENT. SOC. 1870.—PART II. (JUNE.) N

# Pronophila Phædra.

Male. Upperside. Dark brown, the outer margins slightly dentate, the fringe marked with pale yellow lunules. Anterior wing crossed at the middle by a broad band of yellow, which extends towards the anal angle a very little beyond the first branch of the median nervure. Posterior wing with a large central spot of yellow, indented on its outer border.

Underside. Anterior wing as above, except that it is undulate with ochreous-brown near the apex, and is crossed by a submarginal band of black. Posterior wing rufous, beautifully undulate with ochreous yellow, lilae, and dark brown: a large cordate dark brown spot near the middle of the costal margin bordered with yellow: the yellow central spot as above, except that it is undulate with brown, and extends to the anal angle: a submarginal series of pyramidal black spots.

Exp.  $2\frac{1}{20}$  inches.

Hab.—St. Rosario.

On the underside, this species nearly resembles P. Pallantis. A variety of this species has the band of the anterior wing and the spot of the posterior wing white.

## Pronophila Paania.

Male. Upperside. Dark brown: the outer margins dentate, chiefly on the posterior wing. Posterior wing with a large brick-red space (occupying one-third of the wing) at the anal angle, marked with two triangular brown spots.

Underside. Rufons-brown. Anterior wing crossed towards the apex by three oblong spots of ochreous-yellow: two spots of the same colour between the nervures, a lilac triangular spot on the costal margin near the apex. Posterior wing with an angular band near the base, and a broken band at the middle, irrorate with rufous-brown and lilac: a spot of lilac at the apex traversed by a enrved black line: a small spot, a larger lunnlar spot, and three spots forming a triangle near the outer margin, all white.

Exp.  $2\frac{3}{4}$  inches.

Hab.-St. Rosario.

In form, and in the marking of the underside, like *P. Prochyta* and *P. Irmina*.

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## Lymanopoda Labineta.

Male. Upperside. Dark brown. Anterior wing crossed before the middle by a broad irregular band of white, divided by the nervures into four parts: a subapical band of three minute white spots.

Underside. Anterior wing as above, except that the base, apex, and nervures are ochreous-yellow. Posterior wing ochreous, with the base, a band at the middle, and a linear submarginal band, rufous-brown; crossed between the bands by a series of minute black spots, forming a semicircle, not as usual parallel to the outer margin, but in the opposite direction.

Exp.  $1\frac{7}{10}$  inches. Hab.—Cutan. Form and size of L. Samius.

#### Lymanopoda trimaculata.

Male. Upperside. Dark brown, rufous towards the outer margins. Anterior wing with a small black spot, marked with white, between the median nervules. Posterior wing with a series of similar spots, the two largest of which, between the median nervures, have a rufous border.

Underside. As above, except that both wings have a submarginal undulate line of black, and are irrorate with gray on the outer margin: that the black spots of the posterior wing are smaller, or absent, and that there are three white spots near the anal angle.

Exp.  $1\frac{1}{2}$  inch.

Hab.—St. Rosario. Form and size of L. Leæna.

#### Mesosemia Mancia.

*Female.* Upperside. Dark brown. Anterior wing blue from the base (except the costal margin, which is brown) to a large *central quadrate white spot:* the discal spot indistinct, marked with three minute white spots. Posterior wing much produced at the middle of the outer margin, blue, broadly bordered with brown.

Underside. Paler brown. Anterior wing with a short band before the discal spot. Posterior wing with a discal spot, marked with two minute white spots, with an indistinct brown band on each side of it bordered with paler colour. Exp. 2 inches.

Hab.—Gorge.

This, and the three following species, have the posterior wings of the same angular form as M. Telegone and M. Mevania.

# Mesosemia Mamilia.

Male. Upperside. Dark brown. Anterior wing (except the costal margin, which is brown) blue, from the base to the middle: a short line before the discal spot, the discal spot, which is marked with two minute white spots, and a line beyond it (which is not separate from the brown of the rest of the wing till near the submedian nervure), all black: crossed by a curved band of blue beyond the middle. Posterior wing with the basal half blue, the outer half dark brown, traversed by a linear blue band.

Underside. Gray-brown. Anterior wing with the discal spot (which is marked with three minute white spots), and a spot below it, bordered with orange: the line between it and the base longer than above: crossed beyond the middle by a clouded band of white. Posterior wing with the discal spot marked with two minute white spots, and bordered with orange, with bands of orange bordered with brown on each side of it: crossed by a central brown band, and by a submarginal series of brown spots, both bordered inwardly with dull white: the outer margin angular.

*Female* like the male, except that instead of the blue band of the anterior wing, it is crossed by a broad pyriform band of white, and that the posterior wing is crossed before the middle by a linear band of black.

Exp.  $l_{\frac{7}{10}}$  inch.

Hab.—Gorge.

## Mesosemia Mycene.

Male. Upperside. Green. Anterior wing with a short line before the discal spot: the discal spot (which is marked with one minute spot), a linear band beyond it, and the rest of the wing (more than half), black. Posterior wing with the outer margin and nervures near it black.

Underside. Both wings with a discal spot marked with one minute white spot, bordered with orange and crossed on both sides of them by two brown bands: both crossed

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beyond the middle by a broad band of brown. Anterior wing with a small black spot, below the discal spot, bordered with orange: the broad band of brown followed by a band of paler colour. Posterior wing with the outer margin angular.

Exp.  $1\frac{8}{10}$  inch. Hab.—Gorge.

#### Mesosemia Mustela.

Female. Upperside. Rufous-brown. Anterior wing with the discal spot black, marked with three minute white spots: crossed on each side of it by two linear brown bands: crossed beyond the middle by a band of white from the costal margin to the anal angle, where it is narrow, and bordered inwardly with brown: the wing beyond it dark brown. Posterior wing angular at the outer margin, crossed near the base by two linear bands, and beyond the middle by four bands of brown, the two inner bands nearly straight, the outer ones parallel to the margin, which is also brown.

Underside as above, except that the posterior wing has a discal spot, that there are three linear bands beyond the middle, and that the two bands parallel to the outer margin are broken into spots.

Exp.  $1\frac{4}{10}$  inch. Hab.—Gualaquisa. Nearly allied to M. Adida.

### Mesosemia Messula.

*Female.* Upperside. Dark brown. Both wings crossed beyond the middle by a common band of white, broad at the costal margin of the anterior wing, narrow near the anal angle: clouded and indistinct on the posterior wing, where it does not extend to the first branch of the median nervure. Anterior wing with an undefined discal black spot marked with three minute white spots.

Underside as above, except that the discal spot of the anterior wing is blue, that the band of the posterior wing is pale brown, and that there is a small black indistinct discal spot.

Exp.  $1\frac{6}{10}$  inch. Hab.—Gualaquisa. Very nearly allied to M. latifasciata, from which it differs in having a discal spot on the underside of the posterior wing. In this collection, there are examples of M. latifasciata, in which the band of the posterior wing is narrow and indistinct, as in the species now described.

# Compsoteria Callixena.

Female. Upperside. Dark brown. Anterior wing with several spots of white: three in the cell, one below these, large and divided by the second median nervule, an oblique band of two spots (one trifid) and two minute subapical spots: the inner margin gray. Posterior wing gray, crossed obliquely by an equal band of white, bordered on each side with brown, and divided into four parts by the nervures: the outer margin brown, angular.

Underside as above, except that both wings have a submarginal series of white spots, and that the posterior wing is white at the base, spotted with brown.

Exp.  $1\frac{1}{2}$  inch.

Hab.—Gualaquisa.

Although greatly differing in aspect from the two transparent species which I have described, and indeed from all the *Erycinidæ*, its neuration is identical with this genus.

# Compsoteria Celtilla.

*Male.* Upperside. Black. Anterior wing transparent lilac-white from the base to beyond the middle (the margins excepted), divided into five parts by the nervures and a band which crosses the cell: a broad oblique subapical band of the same colour divided into four parts by the nervures. Posterior wing lilac-white, transparent, the nervures and outer margin black.

Underside. As above, except that the costal margin of the posterior wing is white at its base, and that there is a short linear spot of orange at the anal angle.

Exp.  $1\frac{6}{10}$  inch.

Hab.-Gualaquisa.

### Emesis angularis.

*Male.* Upperside. Dark rufous-brown. Both wings of unusual form, crossed by several bands of brown from the

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base to the middle: both with a submarginal band of brown. Anterior wing with a short band of brown from the costal margin beyond the middle: costal margin sinuate in the middle, arched near the apex, apex pointed, outer margin convex. Posterior wing very angular at the middle.

Underside as above, except that it is orange-rufous, and that there is a submarginal series of brown spots.

Exp.  $1\frac{9}{10}$  inch.

Hab.-Chaquinda.

The species of this genus are generally very uninteresting, and so much alike, that it is quite a novelty to receive one so different from all the rest as this is.

#### Chamælimnas Villagomes.

*Male.* Upperside. Black. Anterior wing with a central cordate spot of brilliant yellow. Posterior wing with the basal half of the same colour.

Underside. As above.

Exp.  $1\frac{4}{10}$  inch.

Hab.-Chaquinda.

I have named this species after Mr. Buckley's friend and companion, Mr. Manuel Villagomes, a compliment which he has well merited.

Leptalis .					1 Species.
Euterpe .					1
Ithomia .					4
Agrias .					1
Pronophila					4
Lymanopoda					2
Mesosemia					5
Compsoteria					2
Emesis .			•		1
Chamælimnas		•	•	•	1
					22
	Ithomia . Agrias . Pronophila Lymanopoda Mesosemia Compsoteria Emesis .	Euterpe.Ithomia.Agrias.Pronophila.Lymanopoda.Mesosemia.Compsoteria.Emesis.	Euterpe.Ithomia.Agrias.Pronophila.Lymanopoda.Mesosemia.Compsoteria.Emesis.	EuterpeIthomiaAgriasPronophilaLymanopodaMesosemiaCompsoteriaEmesis	EuterpeIthomiaAgriasPronophilaLymanopodaMesosemiaCompsoteriaEmesis

# Summary of New Species.